

**Practice A**

For use with pages 32–39

Write the verbal phrase as an algebraic expression. Use  $x$  for the variable in your expression.

1. Three more than a number
2. Four less than a number
3. Difference of eight and a number
4. The sum of a number and one
5. Six times a given number
6. One half of a given number
7. A number divided by five
8. Seven more than twice a given number
9. Two less than a number, divided by nine
10. Two more than the product of ten and a number
11. The sum of a number and one, times three
12. The sum of a number and six, divided by two

Write the verbal sentence as an equation or an inequality.

13. Two more than a number  $x$  is ten.
14. The sum of a number  $y$  and four is 13.
15. Eight more than a number  $y$  is greater than or equal to nine.
16. The difference of a number  $a$  and two is seven.
17. Six less than a number  $z$  is less than 15.
18. Eleven minus a number  $b$  is two.
19. The product of two and a number  $x$  is 22.
20. Twelve is less than six times a number  $x$ .
21. One more than four times a number  $b$  is five.
22. The quotient of a number  $t$  and three is eight.
23. A number  $a$  divided by two is greater than five.
24. Four less than the product of six and a number  $a$  is eight.

In Exercises 25 and 26, which equation correctly models the situation?

25. **Model Planes** Your model plane collection consists of 15 models. Each plane is either a propeller plane or a jet. There are 7 more propeller planes than jets. Let  $x$  be the number of jets.  
 a.  $x + (x + 7) = 15$       b.  $x + 7 = 15$
26. **Bake Sale** You make 3 batches of cookies for a bake sale. If you follow the recipe, three batches makes 6 dozen cookies. Let  $d$  be the number of dozen cookies in one batch.  
 a.  $3d = 6$       b.  $\frac{d}{6} = 3$

**Airplane Speed** In Exercises 27–30, use the following information.

A commercial airplane has been flying for two hours and has flown a distance of 360 miles. How fast has it been flying?

Verbal Model: Speed of airplane  $\cdot$  Flight time = Distance traveled

27. Assign labels to the three parts of the verbal model.
28. Use the labels to translate the verbal model into an algebraic model.
29. Use mental math to solve the equation.
30. Check to see if your answer is reasonable.

